



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

**D3641-4**

**Job Sheet 171369**



(D)

Part No: D3641-4

Job Qty: 8 ea

Part Name: Cover RH



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 1/31/18

Job Tracking No:

Due Date: 1/31/18

Created By: Michelle Gagnon-Donovan

Type: **SOLD**

Description:

Note: DWG REV C IPP Rev:A New Issue 07-07-20 JLM Verified By:EC IPP Rev:B ECN 1050 rev.b as per dwg 08-01-10 DD

Ship Via:

### Bill of Materials

### Job Routing

| Op No | Operation          | Qty   | Start Date | Due Date | Standard  |         | Workcenter/Supplier   |           | Sign-off                |
|-------|--------------------|-------|------------|----------|-----------|---------|-----------------------|-----------|-------------------------|
|       |                    |       |            |          | Setup hrs | Run Hrs | Workcenter / Supplier | Lead Time |                         |
| 90    | Start up Operation | 8 Ea  | 1/30/18    | 1/30/18  | 0.00      | 0.00    | Start Up Waterjet     |           | SC 18/02/03             |
| 100   | Waterjet           | 8 pcs | 1/30/18    | 1/30/18  | 0.00      | 0.52    | Waterjet1             |           | SC 18/02/03             |
| 110   | QC                 | 8 pcs | 1/30/18    | 1/30/18  | 0.00      | 0.00    | QC2 Waterjet-2        |           | SC 18/02/03             |
| 120   | QC                 | 8 pcs | 1/30/18    | 1/30/18  | 0.00      | 0.00    | QC8-3                 |           | 9-88                    |
| 130   | Brake NC           | 8 pcs | 1/30/18    | 1/30/18  | 0.00      | 0.34    | Brake NC 1            |           | DAS 38                  |
| 140   | QC                 | 8 pcs | 1/30/18    | 1/30/18  | 0.07      | 0.00    | QC5                   |           | 38                      |
| 150   | HandFinish         | 8 pcs | 1/31/18    | 1/31/18  | 0.00      | 0.50    | HandFinish1           |           | 20 18/02/08 JSC         |
| 160   | QC                 | 8 pcs | 1/31/18    | 1/31/18  | 0.00      | 0.00    | QC7-2                 |           | 38                      |
| 170   | Packaging          | 8 pcs | 1/31/18    | 1/31/18  | 0.00      | 0.00    | Packaging3-1          | 51231A    | 9-88 58L                |
| 180   | QC21-SA            | 8 Ea  | 1/31/18    | 1/31/18  | 0.00      | 0.00    | QC21                  |           | DAS 21 9-88 FEB 09 2018 |

### Job BOM

| Part / Item   | Component Name      | Quantity             | Operation             | Container |
|---------------|---------------------|----------------------|-----------------------|-----------|
| M5052H32S.032 | 5052-H32 .032 Sheet | 6.2808 sf (.7851 ea) | 90-Start up Operation |           |

5038529

⑦

### Job Allocations

| Operation             | Component Part | Required | Inventory | Allocated |
|-----------------------|----------------|----------|-----------|-----------|
| 90-Start up Operation | M5052H32S.032  | 6        | 1         | 0         |

### Part Specifications

Specifications could not be found.

Plex 1/31/18 11:42 AM Dart.Gagnon.Michelle

**DART**  
AEROSPACE  
**S038664**



Cover RH

**Dart Aerospace Ltd.**  
1270 Aberdeen Street  
Hawkesbury, ON K64 1K7  
CANADA  
TEL.: 1 613 632-5200  
Email: [sales@dartaero.com](mailto:sales@dartaero.com)  
[www.dartaerospace.com](http://www.dartaerospace.com)

**PART NO: D3641-4**  
**Original Serial #: S038664**  
**Revision:**  
**Operation:**  
**Change No:**

**Start up Operation**

02/03/18

Job No: 171369

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

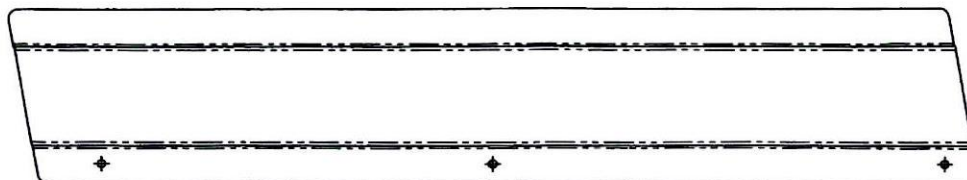
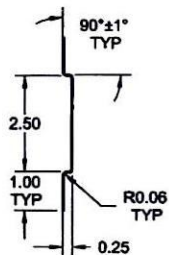
QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

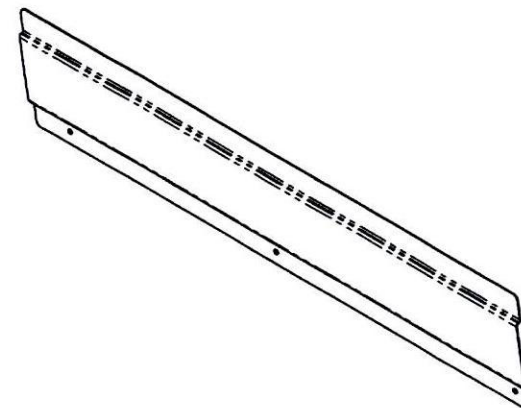
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                              |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/><br/>           Machining <input type="checkbox"/><br/>           Thermoforming <input type="checkbox"/><br/>           Large Fab <input type="checkbox"/> </div> <div>           Cross tube <input type="checkbox"/><br/>           Small Fab <input type="checkbox"/><br/>           Finishing <input type="checkbox"/><br/>           Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/><br/>           Prod. Eng. Coord. <input type="checkbox"/><br/>           Rec/Store/Packaging <input type="checkbox"/><br/>           Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/><br/>           Quality <input type="checkbox"/><br/>           Other <input type="checkbox"/> </div> </div>                                                                                                                                                                                                                                                          |  |                                              |  |
| Date :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Step #:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | QTY Effective :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  | MRB (QSI042) Approval                        |  |
| Description Work Order Deviation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Disposition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  | Completed By                                 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  | Lead hand / Supervisor Approval Verification |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  | QC / QA Coordinator Approval                 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                              |  |
| Root Cause                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | FAULT CATEGORY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                              |  |
| <div style="display: flex;"> <div style="flex: 1;">           Environment <input type="checkbox"/><br/>           Design <input type="checkbox"/><br/>           Doc/Data <input type="checkbox"/><br/>           Equip/Tooling <input type="checkbox"/><br/>           Handling/Pre <input type="checkbox"/><br/>           Material <input type="checkbox"/><br/>           Internal Transport <input type="checkbox"/><br/>           Tribal Knowledge <input type="checkbox"/><br/>           LOA <input type="checkbox"/><br/>           Substation <input type="checkbox"/><br/>           Past Expiry Date <input type="checkbox"/><br/>           Misidentified <input type="checkbox"/> </div> <div style="flex: 1;">           No Re-verification <input type="checkbox"/><br/>           Operator <input type="checkbox"/><br/>           Offset/Setup <input type="checkbox"/><br/>           Supplier <input type="checkbox"/><br/>           Training <input type="checkbox"/><br/>           Use for Testing <input type="checkbox"/><br/>           Poor Information <input type="checkbox"/><br/>           Rushing <input type="checkbox"/><br/>           Product Improvement <input type="checkbox"/><br/>           Process Improvement <input type="checkbox"/><br/>           Manufacturing Process <input type="checkbox"/><br/>           Past Due <input type="checkbox"/> </div> </div> | <div style="display: flex;"> <div style="flex: 1;">           Pressure/Forced <input type="checkbox"/><br/>           Bending <input type="checkbox"/><br/>           Centre Not Concentric <input type="checkbox"/><br/>           Cracks <input type="checkbox"/><br/>           Crimp/Kink/Ripple/Wave <input type="checkbox"/><br/>           Cuffs <input type="checkbox"/><br/>           Crushing <input type="checkbox"/><br/>           Heat Treat <input type="checkbox"/><br/>           Wave/Twist in Tube <input type="checkbox"/><br/>           Marks/Chatter <input type="checkbox"/> </div> <div style="flex: 1;">           Temperature/Cure <input type="checkbox"/><br/>           Set-up <input type="checkbox"/><br/>           BOM/Route <input type="checkbox"/><br/>           Broken/Damage/Defect <input type="checkbox"/><br/>           Inspection Incomplete/Unqualified <input type="checkbox"/><br/>           Contamination <input type="checkbox"/><br/>           Countersink <input type="checkbox"/><br/>           Cut Too Short <input type="checkbox"/><br/>           Instructions Incomplete/Unclear <input type="checkbox"/><br/>           Drill Holes <input type="checkbox"/> </div> </div> | <div style="display: flex;"> <div style="flex: 1;">           Power Loss/Surge <input type="checkbox"/><br/>           Folio/Program <input type="checkbox"/><br/>           Grain <input type="checkbox"/><br/>           Weld <input type="checkbox"/><br/>           Wrong Stock Pulled <input type="checkbox"/><br/>           Out of Sequence <input type="checkbox"/><br/>           Off-set <input type="checkbox"/><br/>           Mislabeled <input type="checkbox"/><br/>           Fit/Function <input type="checkbox"/><br/>           Misaligned/off center <input type="checkbox"/> </div> <div style="flex: 1;">           Positioned Wrong <input type="checkbox"/><br/>           Outside Dimensions <input type="checkbox"/><br/>           Over/Under tolerance <input type="checkbox"/><br/>           Part Incorrect <input type="checkbox"/><br/>           Part Lost/Missing <input type="checkbox"/><br/>           Part Moved <input type="checkbox"/><br/>           Drawing <input type="checkbox"/><br/>           Finish <input type="checkbox"/><br/>           Misread <input type="checkbox"/><br/>           Turning Sequence <input type="checkbox"/> </div> </div> |  |                                              |  |
| OTHER : _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                              |  |



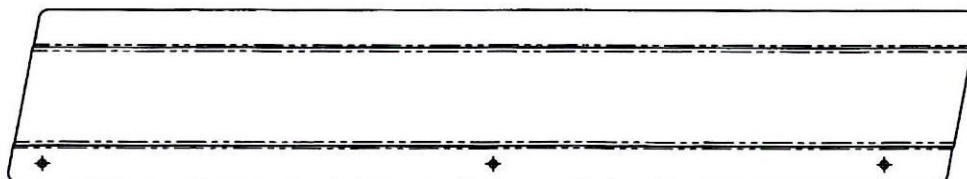
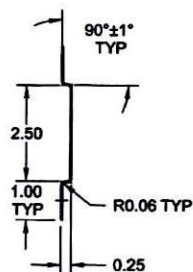
8 7 6 5 4 3 2 1



**D3641-3 COVER**  
(REPLACES GENEVA P/N G10606-5)   
(MAKE FROM D3641-3F FLAT PATTERN)



**D3641-3 COVER (SHOWN)**  
**D3641-4 COVER (OPPOSITE)**



**D3641-4 COVER**  
(REPLACES GENEVA P/N G10606-4)   
(MAKE FROM D3641-3F FLAT PATTERN)

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 171369 *cmf*

JAN 30 2018

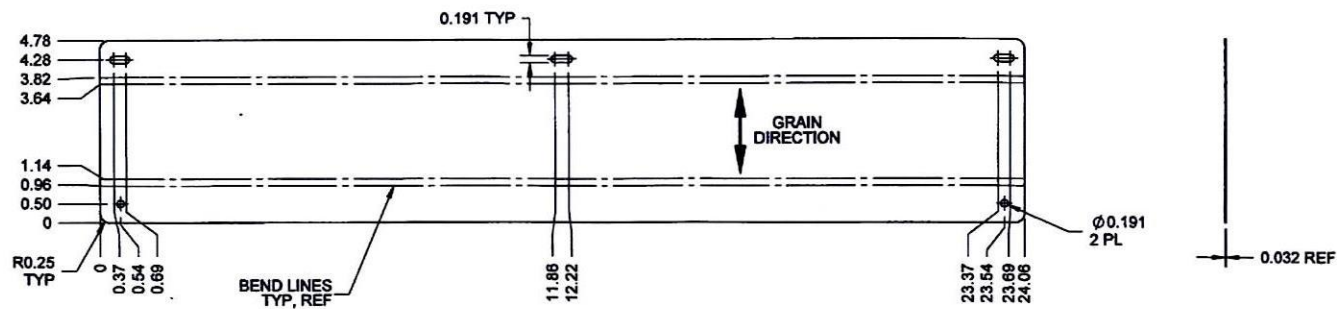
**RELEASE**  
2009-11-10 *mm*

**NOTES:**

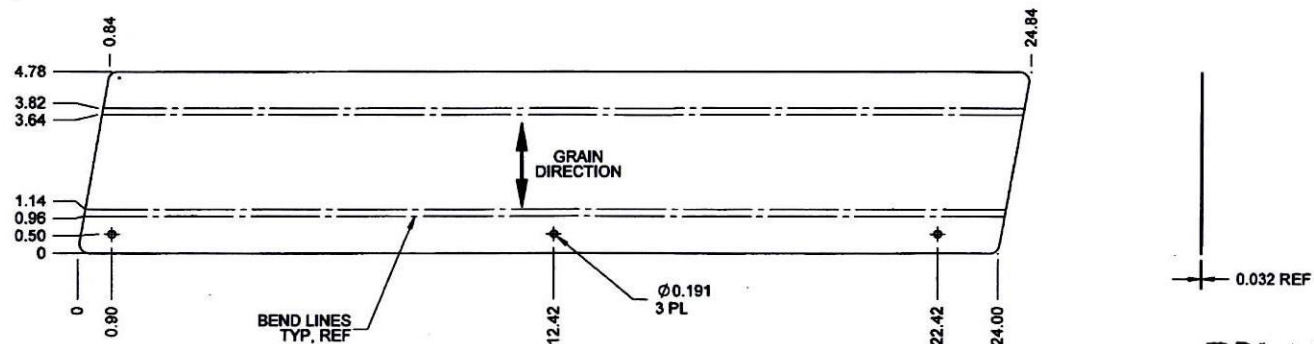
- 1) MATERIAL: D3641-3F FLAT PATTERN
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3641-3/-4" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 0.36 lbs

|            |                    |                                                                                                                                                                                                                                                                                                             |              |
|------------|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| DESIGN     | TS                 | DART AEROSPACE USA, INC.                                                                                                                                                                                                                                                                                    |              |
| DRAWN      | RF                 | PORT HADLOCK, WA                                                                                                                                                                                                                                                                                            |              |
| CHECKED    | <i>[Signature]</i> | DRAWING NO.                                                                                                                                                                                                                                                                                                 | REV. C       |
| MFG. APPR. | <i>[Signature]</i> | D3641                                                                                                                                                                                                                                                                                                       | SHEET 2 OF 3 |
| APPROVED   | <i>[Signature]</i> | TITLE                                                                                                                                                                                                                                                                                                       | SCALE        |
| DE APPR.   | <i>[Signature]</i> | COVER                                                                                                                                                                                                                                                                                                       | NTS          |
| DATE       | 09.10.02           | <small>COPYRIGHT © 2007 BY DART AEROSPACE USA, INC.<br/>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS<br/>NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT<br/>WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small> |              |

8 7 6 5 4 3 2 1



**D3641-1F FLAT PATTERN**



**D3641-3F FLAT PATTERN**

**NOTES:**

- 1) MATERIAL: 5052-H32 ALUMINUM 0.032 THICK PER QQ-A-250/8 OR AMS 4016 OR ASTM B209  
REF DART SPEC M5052H32S.032
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3641-1F/-3F" USING REMOVABLE TAG
- 7) WEIGHT: 0.36 lbs

|                                                                                                                                                                                                                                  |          |                                              |              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------------------------------------------|--------------|
| DESIGN                                                                                                                                                                                                                           | TS       | DART AEROSPACE USA, INC.                     |              |
| DRAWN                                                                                                                                                                                                                            | RF       | PORT HADLOCK, WA                             |              |
| CHECKED                                                                                                                                                                                                                          |          | DRAWING NO.                                  | REV. C       |
| MFG. APPR.                                                                                                                                                                                                                       |          | D3641                                        | SHEET 3 OF 3 |
| APPROVED                                                                                                                                                                                                                         |          | TITLE                                        | SCALE        |
| DE APPR.                                                                                                                                                                                                                         |          | COVER                                        | NTS          |
| DATE                                                                                                                                                                                                                             | 09.10.02 | COPYRIGHT © 2007 BY DART AEROSPACE USA, INC. |              |
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**RELEASED**  
2009-11-10

## FIRST ARTICLE INSPECTION CHECKLIST

| Rev | Date     | Change                            | Revised by | Approved |
|-----|----------|-----------------------------------|------------|----------|
| A   | 07.10.24 | New Issue                         | KJ/EC/DD   |          |
| B   | 08.12.01 | Dimensions updated per Dwg Rev. B | KJ/EC      |          |
| C   | 09.09.15 | Dimensions updated                | KJ         |          |
| D   | 12.03.08 | Dwg Rev updated                   | KJ         |          |